November 30, 2021

US Department of Transportation
Docket Operations
1200 New Jersey Avenue, SE
Washington, DC 20590

RE: Support for Petition for an exemption for relief from §§91.205(h)(7), 91.9(a), 135.160, and 135.179(a). Docket No. FAA-2021-1028

The Air Medical Operators Association (AMOA) members operate over 90 percent of air medical transports in the United States, and the Association of Air Medical Services (AAMS) represents the entire air medical industry and over 250 air ambulance services across the country. AMOA and AAMS support the Petition for Exemption, dated October 29, 2021, by Helicopter Association International (HAI) for relief from §§91.205(h)(7), 91.9(a), 135.160, and 135.179(a) (HAI petition). AMOA and AAMS in further support of the HAI petition offer clarifications to its proposed Conditions and Limitations.

Discussion.

The relief sought is to allow for helicopter operations under 14 CFR Part 135 with radar (radio) altimeters that are either inoperative or unreliable due to radio frequency interference caused by the Federal Communications Commission's (FCC) allocation of a portion of the 3.7–3.98 GHz frequency band available for flexible use including 5G cellular applications.

On November 2, 2021, FAA issued a Special Airworthiness Information Bulletin (SAIB) regarding the risk of potential adverse effects on radio altimeters due to this potential interference. The SAIB informed aircraft manufacturers, radio altimeter manufacturers, operators, and pilots of the planned deployment of wireless broadband networks in the 3700-3980 MHz bands, which is scheduled to begin on December 5, 2021, in the 3700-3800 MHz bands. The SAIB stated FAA is currently conducting a risk assessment to ascertain whether further mitigation is warranted in addition to the recommended actions in this SAIB. We urge you to grant the HAI petition with the changes herein proposed as a mitigation to the risk of potential adverse effects of 5G cellular applications on radar altimeters the FAA has identified.

For improved clarity, we propose the following changes noted in italics to the Conditions and Limitations in the HAI petition and submit that an equivalent level of safety will be maintained

by users of the exemption, if granted, provided the Conditions and Limitations are complied with:

Conditions and Limitations.

1. Helicopters may be operated under Part 135 with an inoperative or unreliable radar altimeter *or with one that is suspected of not functioning normally*, including operations to and from unimproved areas at night provided:

a. The aircraft is equipped with a moveable searchlight which the pilot must use to assist in obstacle detection.

b. Prior to landing, the pilot or other crewmember, *unless circumstances prohibit, should* contact personnel on the ground at the landing site to receive and confirm obstacle information for the landing site.

c. For VFR flight at night, flight crew must evaluate terrain and obstacles along the route and fly at such an altitude so as to ensure all terrain and obstacles along the route of flight are cleared vertically by no less than 500 feet.

d. VFR flight at night is not conducted without adequate visual surface light reference.

e. Flight crew is aware of potential degraded Autopilot performance on ILS, glideslope, or LPV.

f. Category A operations which require the use of the radar (radio) altimeter are not performed.

g. Overwater operations conducted *under VFR* beyond the autorotational distance from shoreline as defined in §135.168, shall not be conducted with a flight visibility of less than 1 statute miles during the day and 2 statute miles at night.

h. Overwater operations conducted beyond the autorotational distance from shoreline as defined in §135.168, shall maintain an altitude of at least 500 feet using a barometric altimeter from a source not farther than 100 nautical miles, *except under FAA authorized instrument procedures so as not to preclude or restrict IFR operations.*

i. HAA operations in Class G airspace will be conducted with weather minimums no lower than those specified in 14 CFR 135.609

Note: Inoperable radar altimeters will be deferred in accordance with the certificate holder's approved Minimum Equipment List procedures.

2. Night vision goggle operations with an unreliable or inoperative radar altimeter or with one that is suspected of not functioning normally, including operations to and from off-airport and unimproved landing sites may be conducted in accordance with the provisions set forth below.

a. The aircraft is equipped with a moveable searchlight which the pilot must use to assist in obstacle detection.

b. Prior to landing, the pilot or other crewmember*, unless circumstances prohibit, should* contact personnel on the ground at the landing site to receive and confirm obstacle information for the landing site.

3. Part 135 Air Carriers and Air Operators will train all pilots prior to the use of this Exemption on the following:

a. The provisions of this Exemption.

b. The possibility that radar altimeter indications may be unreliable.

c. The radar altimeter could fail due to 5G C-Band radio frequency interference.

d. That pilots must be alert for, and be able to recognize, erroneous indications from the radar altimeter.

Summary.

The grant of the HAI Petition for Exemption is in the public interest as it supports the continuity of air ambulance operations. Part 135 certificate holders conducting air ambulance operations are critical in supporting essential, effective emergency medical service. Restricting these operations due to radar altimeter interference or unreliability caused by unresolved 5G deployment issues could come at costs to lives.

We strongly urge the FAA to timely address this request for relief from §§91.205(h)(7), 91.9(a), 135.160, and 135.179(a) to allow for operations to be conducted under 14 CFR Part 135, including operations with NVGs and night landings and takeoffs from unimproved or off-airport sites, with inoperative or unreliable radar altimeters. The relief will enable operators to continue delivering life-saving transportation.

We commend the FAA for its ongoing efforts to ensure that 5G deployment does not have unintended consequences that would undermine safe and efficient aviation operations.

Respectfully submitted,

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